

Office Action Summary

Application No.

10/566,105

Applicant(s)

DENHOLM, ANN

Examiner

Eric Hug

Art Unit

1791

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 11 September 2008.
2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 14, 16 and 18-33 is/are pending in the application.
4a) Of the above claim(s) _____ is/are withdrawn from consideration.
5) ☐ Claim(s) _____ is/are allowed.
6) ☒ Claim(s) 14, 16 and 18-33 is/are rejected.
7) ☐ Claim(s) _____ is/are objected to.
8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☐ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☐ Information Disclosure Statement(s) (PTO/SB-08)
Paper No(s)/Mail Date _____
4) ☒ Interview Summary (PTO-413)
Paper No(s)/Mail Date _____
5) ☐ Notice of Informal Patent Application
6) ☐ Other: _____

DETAILED ACTION

The following is in response to the amendment filed September 11, 2008.

Response to Arguments

Applicant's arguments filed September 11, 2008 have been considered. Full reconsideration of the application as amended has been given. Reference is made to the interview with Craig Hayden on September 4, 2008.

Applicant has overcome all claims objections set forth previously.

Applicant has overcome all rejections under 35 U.S.C. 112, first paragraph, set forth previously.

Applicant has overcome all rejections under 35 U.S.C. 112, second paragraph, set forth previously.

Applicant has overcome the rejection under 35 U.S.C. 103(a) over Schulenburg (US 2,881,088) set forth previously. It is recognized that Schulenburg does not teach or suggest the claimed combinations of steps of making a fire retardant resinous compound comprising borax and diammonium phosphate followed by impregnation into a kraft paper therein producing an immersible fire retardant paper .

The amended claims still present several issues under 35 U.S.C. 112, first and second paragraphs as discussed below. Many of the claimed steps cannot be gleaned from the instant specification. Applicant has stated that support for the claims can be found in paragraphs 24 and 26-32. However, there are no paragraphs numbered in this manner, so it is uncertain to which paragraphs Applicant is referring. Even if one counts paragraphs from the very beginning, it is

still unclear how the claimed steps are supported by those paragraphs. The only paragraph of the specification from which some support can be found is given on page 6, line 13 to page 7, line 4:

"In a particularly preferred embodiment, an absorbent, unbleached kraft paper is introduced to a fire retardant resinous compound containing borax and diammonium phosphate. The resin system is accelerated and stabilised using sodium hydroxide as a solution "buffer". The sodium hydroxide solution enables the pH of the total system to remain at a level greater than 9.0 without any sludge or residue forming during the addition of the borax which would normally tend to lower the pH to a range of 3.0-3.5 due to the formation of acid as the tetraborate complexes with the phenol resin during the mixing process. The stability of the fire-retardant compound is further improved if the resin system is introduced to the fire retardant formulation during component mixing. This will result in a gelatinous compound which is then easily dispersed and dissolved when added to the base resin bath at a rate of approximately 3-6%/volume with vigorous agitation."

Applicant is requested to clearly point out in the specification where support for the claimed steps can be found. If any support was in the original claims which have been since cancelled, the specification must be amended to provide the support for the new claims.

Claim Rejections - 35 USC § 112

The following is a quotation of the first paragraph of 35 U.S.C. 112:

The specification shall contain a written description of the invention, and of the manner and process of making and using it, in such full, clear, concise, and exact terms as to enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to make and use the same and shall set forth the best mode contemplated by the inventor of carrying out his invention.

Claims 14, 16, and 18-33 are rejected under 35 U.S.C. 112, first paragraph, as failing to comply with the enablement requirement. The claims contains subject matter which was not described in the specification in such a way as to enable one skilled in the art to which it pertains, or with which it is most nearly connected, to make and/or use the invention.

Regarding independent claims 14, 25, and 32, the specification lacks support for the features of the following steps:

- adding a fire retardant compound to a portion of a resin to form a partial mixture--
-- adding the remaining portion of the resin to said stabilized partial mixture to form a fire retardant resinous compound-- (emphasis added).

There is no disclosure of providing a portion of resin from a base resin bath. Thus, there is no support for adding a fire retardant compound to a portion of a resin, nor is there support for adding a remaining portion of the base resin bath to the stabilized partial mixture.

Furthermore, regarding claims 25 and 32, and dependent claims 16, 18, and 26, the specification lacks support for simultaneous addition of a solution buffer and a fire retardant compound to a portion of the resin.

All other claims are rejected as being dependent on any of the above claims.

The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

Claims 14, 16, and 18-33 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

Claims 14, 25, and 32 recite "adding the remaining portion of the resin to said stabilized partial mixture to form a fire retardant resinous compound..." (emphasis added). There is insufficient antecedent basis for this limitation in the claim. The examiner interprets this as meaning the remaining resin from the base resin bath (that part which is not used in making the mixture). Applicant is requested to amend the claim language to clearly distinguish the remaining portion of the base resin from the portion of the resin used in the mixture.

Claim 32 also recites after the step of forming a gelatinous compound:

"adding the gelatinous compound to the base resin bath;

subjecting the base resin bath to a temperature of about 140°C to about 150°C for a time sufficient to cure the resin;

mixing said fire retardant compound and said solution buffer with said resin;

adding the remaining portion of the resin to said stabilized partial mixture to form a fire retardant resinous compound..."

It appears the underlined step is out of sequence, because the gelatinous compound arises upon mixing of the fire retardant compound and buffer with the resin. It is also not clear what constitutes "the remaining portion of the resin" if the base resin bath has already been cured.

All other claims are rejected as being dependent on the above claims.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Eric Hug whose telephone number is (571)272-1192.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Steven Griffin can be reached on 571 272-1189. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/Eric Hug/
Primary Examiner, Art Unit 1791